REMARKS

The "wherein" clause of claim 1 has been amended as follows: "wherein the number of titanium-containing ~~particles, the~~ particles having an equivalent circular diameter of ~~which is~~ 1 μm or more[[,]] is less than 100/0.02 mg of the composition." This amendment is a mere rephrasing of the limitation already present in claim 1, i.e., that the number of titanium-containing particles having an equivalent circular diameter of 1 μm or more is in the range of 0 to 100 particles per 0.02 mg of the composition, and absolutely does not change the scope of the claim. The amendment is does not require further search and/or consideration and is proper for entry.

Claims 1 to 5, 8 to 11, 13 to 15 and 16 to 18 are again rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al. (U.S. Patent No. 6,365,659; hereinafter "Aoyama"). This rejection was first made in the Office Action dated June 4, 2007.

In the response filed September 4, 2007, applicants argued that the composition of Aoyama does not have a number density of titanium-containing particles of less than 100/0.02 mg. This is because, in Aoyama, it is essential to add titanium-containing compound oxide particles, but the compound oxide becomes a slurry as described in Example 1 of Aoyama (Col. 14, line 29). On the

contrary, since the titanium catalyst used in the present application is a solution, not a slurry, it is possible to achieve a number density of titanium-containing particles of less than 100/0.02 mg.

In support of this position, applicants submitted a table, Table 1, with the response which included data of the number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, of each of the polyester resins produced in Examples 1, 4-11, 13 and 14 of Aoyama. The number density was measured according to the measuring method used in the examples of the present application (see page 62, line 11, to page 64, line 16). The data showed that none of the examples of Aoyama meet the limitation that the number density of titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, is less than 100/0.02 mg of the composition as required by the claims of the present application. The compositions of Aoyama all contain significantly more than 100 titanium-containing particles, the equivalent circular diameter of which is 1 μm or more, per 0.02 mg of the compositon.

In the present action, the Office has maintained the rejection on the basis that "in order to meet the limitation of Claim 1, reference **does not need disclose particle with 'equivalent diameter**

1 micron or more, in a quantity less than 100/0.02 mg' because quantity equal less than 100/0.02 mg included **zero (no) particles.**" (emphasis in original) (page 5, lines 11 to 14, of Action). From this statement, it appears that the Office has misunderstood the arguments and data of the previous response.

First, the Office's assertion that in order to anticipate the present invention, Aoyama does not need to disclose a composition having particles with an equivalent diameter of 1 μm or more, in a quantity less than 100/0.02 mg because this range includes zero particles, is correct but misses the issue. In order for the rejection under 35 U.S.C. 102(b) to be proper, Aoyama must disclose a composition that includes every element of the claims. In order to anticipate the composition of claim 1 of the present application, Aoyama must disclose a composition that inherently has 0 to less than 100/0.02 mg of the composition (i.e., not 100/0.02 mg or more than 100/ 0.02 mg) of titanium-containing particles having a diameter of 1 μm or more. The fact the lower end of the range recited in the claims of the application includes zero number of such particles does not change this requirement.

The Office appears to suggest that, if Aoyama discloses nothing concerning titanium-containing particles having a diameter of 1 μm or more, it can be concluded that the compositions of

Aoyama do not inherently contain such particles. This is not correct. The issue is whether compositions prepared according to the teachings of Aoyama would inherently not contain such particles. The data of Table 1 show that the actual compositions disclosed in the examples of Aoyama do, in fact, contain such particles. This is evidence that the compositions prepared according to Aoyama inherently contain such particles and rebuts the position of the Office that Aoyama anticipates the present invention. The Office must remove the 35 U.S.C. § 102 rejection unless it can show by proper evidence or reasoning that compositions prepared according to the teachings of Aoyama would not inherently contain more than 100/0.02 mg of the composition of titanium-containing particles having a diameter of 1 μm or more. A copy of Table 1 is attached hereto for the convenience of the Office.

Referring to Table 1, the heading "Average particle size" is the average particle size of Particle (X) added as a lubricant, such as titanium dioxide or silicon oxide. In Aoyama, both Compound oxide (A) as a catalyst and Particle (X) as a lubricant, such as titanium dioxide or silicon oxide, are counted as a "Number of particle" in Table 1.

The fourth column from the right side in Table 1 shows the number of particles having an equivalent circular diameter of 1 μm or more per 0.02 mg of the composition. These data include particles of both Compound oxide (A) and Particle (X). The second column from the right side in Table 1 shows the number of particles of Compound oxide (A) alone having an equivalent circular diameter of 1 μm or more per 0.02 mg of the composition. The "Particles (X)" are not added here.

Thus, the data of both the fourth column and the second column show that the compositions of Aoyama contain more than 300 particles having an equivalent circular diameter of 1 μm or more per 0.02 mg of the composition (regardless of the presence of "Particles (X)"). That is, the number of particles having an equivalent circular diameter of 1 μm or more, which result from Compound oxide (A) of the catalyst, is more than three hundred per 0.02 mg of the composition.

Such particles having an equivalent circular diameter of 1 μm or more result from Compound oxide (A) of the catalyst, are an alien substance or a foreign body in the composition. A distinguishing characteristic of the present invention is that the alien substance and the foreign bodies resulting from the catalyst of the present invention are very few. That is, the number of

titanium containing particles having an equivalent circular diameter of 1 μm or more is less than 100/0.02 mg of the composition.

Since Aoyama does not disclose each and every element of the claims of the present application, the 35 U.S.C. 102(b) rejection of the claims must fail.

Removal of the 35 U.S.C. 102(b) rejection of the claims is believed to be in order and is respectfully requested.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, in view of Naylor et al. (WO 97/47675). Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, and in view of Kato et al. (U.S. Patent No. 6,680,353). Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama as applied to claims 1-5, 8-11, 13-15 and 16-18, and in view of Uchida et al. (U.S. Patent No. 6,670,030).

Each of the rejections of claims 6, 7, 12 and 19, which depend directly or indirectly from claim 1, depends on the 35 U.S.C. 102(b) rejection of claim 1 based on Aoyama. Since claim 1 has been shown to be patentable, claims 6, 7, 12 and 19 are also patentable.

Furthermore, none of the secondary references cited in the rejections overcome the failure of Aoyama to teach a number density of titanium-containing particles of less than 100/0.02 mg of composition.

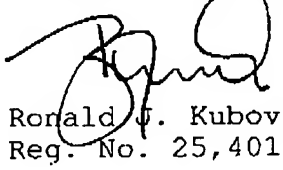
Removal of the 35 U.S.C. 103(a) rejections of the claims is also believed to be in order and is respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated September 19, 2007.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension and any additional required fees may be charged to Deposit Account No. 111833.

Respectfully submitted,

KUBOVCIK & KUBOVCIK



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Attachment: Copy of Table 1

Table 1 Test Results of Examples of US8385659

	Particles (X)			Compound oxide (A)		Phosphorus compound (B)		Alkaline earth metal or cobalt compound (C)		Polyester resin properties	Film properties	Particles (X) not added	
	Compound	Average particle size (μm)	Content (wt%)	Ti/Si (molar ratio)	Content as titanium atoms (ppm)	Content as phosphorus atoms (ppm)	Ti/P (molar ratio)	Metal (content as metal atoms) (ppm)	Ti/metal (molar ratio)	Number of particles (pcs/0.02 mg)	Number of dropouts (accepted or rejected/quantity)	Polyester resin properties: Number of particles (pcs/0.02 mg)	Film properties: Number of dropouts (accepted or rejected/quantity)
Example 1	Titanium dioxide	0.56	0.5	90/10	15	30	0.32	Cobalt (47)	0.39	>300	Rejected/60	>300	Rejected/35
Example 4	Titanium dioxide	0.56	0.5	95/5	15	1.5	6.5	Cobalt (47)	0.39	>300	Rejected/63	>300	Rejected/43
Example 5	Titanium dioxide	0.56	0.5	80/20	20	32	0.4	Cobalt (120)	0.2	>300	Rejected/62	>300	Rejected 40
Example 6	Titanium dioxide	0.56	2.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected /82	>300	Rejected 47
Example 7	Titanium dioxide	0.56	0.01	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected /83	>300	Rejected/47
Example 8	Silicon oxide	0.32	1	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/51	>300	Rejected/47
Example 9	Silicon oxide	0.25	0.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/50	>300	Rejected/47
Example 10	Silicon oxide	2	0.5	90/10	40	30	0.86	Cobalt (47)	1	>300	Rejected/66	>300	Rejected/47
Example 11	Titanium dioxide	0.56	0.5	90/10	15	30	0.32	Calcium (40)	0.3	>300	Rejected/60	>300	Rejected/37
Example 13	Titanium dioxide	0.56	0.5	85/15	20	0.8	16	Cobalt (40)	0.46	>300	Rejected/65	>300	Rejected/35
Example 14	Titanium dioxide	0.56	0.5	90/10	17	10	0.22	Cobalt (180)	0.12	>300	Rejected/61	>300	Rejected/42